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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Amit Lewin

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MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.

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EXAMINER

NGUYEN, VAN KIM T

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/654,619	Applicant(s) LEWIN ET AL.	
	Examiner Van Kim T. Nguyen	Art Unit 2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 3, 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11 and 30-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11 and 30-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the Appeal Brief filed on July 3, 2008, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Bunjob Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit 2456.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re*

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Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 8-11 and 30-56 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,680,940.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-3 of '940 essentially discloses all the claimed limitations, namely transmitting and receiving VDSL frames over VDSL facility by either encapsulating or extracting Ethernet frames.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 8-11, 38-39, 41, 48-51, and 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry et al (US 6,178,161), in view of Locklear, Jr. et al (US 6,125,116), hereinafter Locklear.

Regarding claims 8, 38-39, 48-51 and 53-55, Terry discloses a method of transmitted data, comprising:

receiving Ethernet frames from an Ethernet source (e.g., Ethernet (ENET) frames are communicated between 12 and 14 using point to point protocol; Figure 1, col. 5: line 48 – col. 6: line 6);

storing the Ethernet frames for subsequent forwarding (e.g., the master and slave modem buffer Ethernet frames for sending either upstream to the master modem or downstream to the slave modem; col. 6: lines 7-10); and

encapsulating the previously stored Ethernet frames within a plurality of frames, wherein each Ethernet frame is encapsulated entirely within a respective frame of the plurality of frames (col. 1: lines 52-55 and col. 6: lines 40-52; Figure 2).

Terry does not explicitly disclose transmitting the plurality of frames over the VDSL facility.

Locklear teaches transmitting the plurality of frames over the VDSL facility (data frame data transmitted and received between VDSL modems 50 and Ethernet interface 68; Figure 2, col. 5: line 58 – col. 6: line 25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Locklear's method of using modifiable VDSL modems in Terry's system, motivated by the need of providing greater connectivity and better access for data communications at higher rates.

Regarding claim 10, Terry discloses a method of extracting Ethernet frames from a VDSL facility comprising:

receiving frames wherein a given Ethernet frame is encapsulated entirely within a received frame (e.g., Ethernet (ENET) frames are communicated and encapsulated; Figures 1-2, col. 1: lines 52-55 and col. 5: line 48 – col. 6: line 52);

extracting Ethernet frames from the received frames (col. 8: lines 34-63);

storing the frames for subsequent forwarding (e.g., the master and slave modem buffer Ethernet frames for sending either upstream to master modem 12 or downstream to slave modem 14; col. 6: lines 7-10); and

forwarding the frames to an Ethernet source (e.g., the master and slave modem buffer Ethernet frames for sending either upstream to master modem 12 or downstream to slave modem 14; col. 6: lines 7-10).

Terry does not explicitly disclose the received frame is from a VDSL facility.

Locklear teaches receiving the plurality of frames over the VDSL facility (data frame data transmitted and received between VDSL modems 50 and Ethernet interface 68; Figure 2, col. 5: line 58 – col. 6: line 25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Locklear's method of using modifiable VDSL modems in Terry's system, motivated by the need of providing greater connectivity and better access for data communications at higher rates.

Regarding claims 9, 11 and 41, Terry-Locklear also discloses Ethernet source comprises a 10BaseT Ethernet source (Terry; col. 5: lines 55-57).

6. Claims 30-32, 34-36, 40, 42-44, 46-47 and 52-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry-Locklear, and further in view of Treadaway et al (US 7,002,941).

Regarding claims 30, 34 and 40, Terry-Locklear does not explicitly disclose the Ethernet source comprising a 100BaseT Ethernet source.

Treadaway teaches the Ethernet source comprising a 100BaseT Ethernet source (Treadaway; col. 8: lines 29-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Terry-Locklear's method of transmitting data packet in Treadaway's system, in order to provide a smooth and efficient method of transferring digital data.

Regarding claims 31, 35 and 42, Terry-Locklear discloses substantially all the claimed limitation, except the encapsulating comprises inserting a length field prior to the Ethernet frame.

Treadaway also discloses the encapsulating comprises inserting a length field prior to the Ethernet frame (col. 13: lines 39-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Treadaway's method of inserting a length field prior to Ethernet frame in Terry-Locklear's system, in order to provide a traditional low cost and low complexity associated with Ethernet technology while achieving QoS.

Regarding claims 32, 36 and 43, Terry-Locklear-Treadaway also discloses inserting a preamble prior to the length field (Treadaway; col. 13: lines 39-46).

Regarding claim 44, Terry-Locklear-Treadaway also discloses the preamble comprises a plurality of bytes exhibiting high autocorrelation properties (Treadaway; Table 1, col. 14).

Regarding claims 46-47, Terry-Locklear-Treadaway also discloses the first frame excludes an Ethernet preamble that preceded the Ethernet frame on an Ethernet medium (Treadaway; col. 13: lines 39-46).

Regarding claims 52 and 56, Terry-Locklear-Treadaway also discloses encapsulating a plurality of Ethernet frames in respective frames, wherein the plurality of Ethernet frames to be of variable lengths (Treadaway; col. 14: lines 16-39).

7. Claims 33, 37 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry-Locklear, in view of Snodgrass et al (US 5,365,551).

Terry-Locklear does not explicitly disclose the preamble comprising a Barker code.

Snodgrass teaches the preamble comprising a Barker code (col. 10: line 65 – col. 11: line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Snodgrass's method of using the Barker code in Terry-Locklear's system, motivated by the need of synchronizing the transmitted information.

Conclusion

8. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Van Kim T. Nguyen whose telephone number is 571-272-3073. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Van Kim T. Nguyen
Examiner
Art Unit 2456

vkn
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